

**REMARKS**

The Final Office Action of March 30, 2004, has been received and its contents carefully noted. Claims 8-50 are currently pending, of these claims 8 and 12-50 have been withdrawn from consideration. No new matter has been added. Reconsideration of the subject application in view of Amendments and the following remarks is respectfully requested.

**Restriction/Election**

The Examiner maintains the election/restriction requirement of Office Action dated November 20, 2003. Additionally, the Examiner, provides an election requirement by original presentation under 37 CFR § 1.142(b). Applicants respectfully traverse the election/restriction requirement.

Although unclear from the restriction/election requirement, it appears the Examiner first applies a restriction requirement between Groups I-III (Product) and IV-VII (Method) and subsequently provides an election requirement for claims of Groups I-III. Applicants respectfully request clarification if this is not the Examiner's intention.

With regard to the election requirement between claims of Groups I-III, the Examiner states "groups I-III read on specifically different embodiments with mutually exclusive characteristics underlined above in each group." (Office Action at p. 5). Applicants, respectfully submit with regard to this election requirement, the Examiner has not set forth how the claims of these Groups are directed towards independent and distinct inventions. Applicants note that the claims of these Groups have disclosed relationships, for example, claims of Groups I and II are directed towards liquid crystal displays. Furthermore, the Examiner merely asserts that the preambles are different, thus the claims are directed towards different species, which is

materially deficient as it does not show: i) that the species are directed towards different embodiments, ii) that the claims are restricted to species having mutually exclusive characteristics, and iii) that the inventions are independent as required by MPEP §§ 806, 806.04(e), and 806.04(f).

In light of the above-identified deficiencies in the outstanding election/restriction requirement, it is respectfully submitted that certainly claims 8-11 and 26-29 should be examined together. Also, Applicants submit that the examination of claims of Groups IV-VII with the claims of Groups I-III would not be unduly burdensome to be examined in the present application.

Moreover, the Examiner applies a new election requirement by original presentation, which is traversed for similar reasons as stated above. With regard to this election requirement, Applicants respectfully submit that claim 9 is generic to at least claims 47-50. Additionally, the Examiner has not set forth how claims 39-46 and 47-50 are directed towards to different embodiments as required by MPEP § 806.04(e). Again, the Examiner merely asserts that the preambles are different, thus the claims are directed towards different species, which is materially deficient as it does not show i) that the species are directed towards different embodiments, ii) the claims restricted to species by mutually exclusive characteristics, and iii) inventions are independent as required by MPEP §§ 806, 806.04(e), and 806.04(f).

In light of the above-identified deficiencies, the outstanding election requirement is improper. Certainly claims 39-50 should be examined with at least the claims of Groups I-III as it would not be unduly burdensome for the remaining claims also to be examined in the present application.

Accordingly, Applicants respectfully request withdrawal of the Election/Restriction requirement as it is materially deficient.

**Title Objection**

In the Office Action, the title of the invention has been objected to for not being descriptive. Applicants respectfully submit that the amended title is in full compliance with 37 CFR § 1.75(d)(1).

Accordingly, Applicants respectfully request withdrawal of the objection.

**Priority**

Applicants respectfully submit a certified copy of the following foreign priority documents to perfect its claim for foreign priority under 35 U.S.C. § 119. The documents are as follows: Korean Patent Application Nos. 2000-47001, 2001-1791, 2001-47318, and 2001-47489 filed on August 14, 2000, January 12, 2001, August 6, 2001, and August 7, 2001, respectively.

**Specification Objection**

In the Office Action, the specification has been objected to for allegedly lacking proper antecedent basis for the claimed subject matter. Applicants respectfully traverse this objection and request reconsideration.

The Examiner asserts, "claim 10 ... calling for 'the first and second protrusion are formed with one or more of a photosensitive organic insulating layer, a photoresist film, and a silicon-based insulating layer' is not described in the specification." (Office Action at p. 9). Moreover, the Examiner alleges that "the specification (third paragraph in page 21)" does not have proper

antecedent basis due to the recitation of an indefinite article "a". (Office Action at p. 9). Applicants respectfully submit that the Examiner's interpretation of the specification is inconsistent with its disclosure.

Additionally, the Federal Circuit "has repeatedly emphasized that an indefinite article 'a' or 'an' in patent parlance carries the meaning of 'one or more' in open-ended claims containing the transitional phrase 'comprising.' Unless the claim is specific as to the number of elements, the article 'a' receives a singular interpretation only in rare circumstances when the patentee evinces a clear intent to so limit the article." *KCJ Corp. v. Kinetic Concepts, Inc.*, 223 F.3d 1351, 1356 (Fed. Cir. 2000). Even though *KCJ Corp.* is directed towards claim language, it is applicable by analogy. For example, the scope of claim 10 as originally filed clearly sets forth Applicants intention for "a" to mean one or more and the specification, if properly interpreted, provides antecedent support for claim 10.

Accordingly, Applicant respectfully requests withdrawal of the objection to claim 10 or the specification as both are in full compliance with 37 C.F.R. § 1.75(d)(1).

### **Rejections Under 35 U.S.C. § 103**

In the Office Action, claims 9-10 have been rejected under 35 U.S.C. § 103(a) for being allegedly unpatentable over U.S. Patent No. 6,501,529 issued to Kurihara, *et al.* ("Kurihara"). Applicants respectfully traverse this rejection.

To establish a *prima facie* case of obviousness under 35 U.S.C. § 103, three basic criteria must be met. First, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Second, there must be some suggestion or motivation in the references

themselves to modify the reference or to combine reference teachings. Third, there must be a reasonable expectation of success for the modification or combination of references.

The teaching or suggestion to make the modification or combination of prior art and the reasonable expectation of success must both be found in the prior art, and not based on Applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). There must be particular findings as to the specific understanding or principle within the knowledge of a skilled artisan that would have motivated one with no knowledge to the claimed invention to combine or modify references. *In re Kotzab*, 217 F.3d 1365, 55 U.S.P.Q.2d 1313 (Fed. Cir. 2000).

More particularly, claim 9 recites, *inter alia*,

a common electrode formed on the color filter; and  
first and second protrusions formed on the common electrode, the first protrusion having a first thickness, the second protrusion having a second thickness, the second thickness being greater than the first thickness.

Kurihara fails to teach or suggest at least these features.

The Examiner asserts:

a first 31/106 protrusion and second protrusions 32/105 formed on the common electrode 25. Noted that position of the convex-shaped part/first protrusion 31 and the pillar-shaped/second protrusion 105 are not limited to one substrate, but can be formed on either the first or the second substrate as disclosed in col. 4, lines 33-36 and col. 6, lines 40-45. Therefore, it would have been obvious for one of ordinary skill in the art to form the first 31/106 and second protrusion 32/105 on the common electrode 25). (Office Action at pp. 10-11).

In contrast to the Examiner's assertions, Kurihara discloses at col. 4, ll. 33-36, the following:

Additionally, the convex-shaped part 31 may be formed on the surface of the second substrate 17 or on both surfaces of the first substrate 14 and the second substrate 17. (emphasis added.)

Unlike the Examiner's assertions, Kurihara discloses forming convex-shaped part 31 on the surface of the second substrate 17. However, does not teach forming "first and second protrusions formed on the common electrode" as recited in claim 9. That is, forming a convex-shaped part 31 on the surface of the second substrate is not identical to forming a first and second protrusion on the common electrode. Moreover, the Examiner's reliance on col. 6, ll. 40-45 is also misplaced. Kurihara discloses at col. 6, ll. 40-45, the following:

In FIG. 9, the pillar-shaped spacer 105 is formed on the gate line 112-1. However, a position where the pillar-shaped spacer 105 is formed does not need to be limited, as far as the pillar-shaped spacer 105 may be formed between the first substrate 101 and the second substrate 102, which make a pair, may sustain these substrates. (Emphasis added).

This passages addresses the position of the pillar spaced spacer 105, which the Examiner has equated to the second protrusion. Accordingly, Kurihara fails to teach or suggest the "first and second protrusions formed on the common electrode" as recited in claim 9.

Therefore, the Examiner statement, "it would be obvious to form ... second protrusions ... on the common electrode 25" is outside the scope of Kurihara's teachings. Accordingly, from this statement, it appears that the Examiner is relying on Official Notice to cure the deficiencies of Kurihara. The Examiner may take official notice of facts outside of the record which are capable of instant and unquestionable demonstration as being "well-known" in the art. *In re Ahlert*, 424 F.2d 1088, 1091, 165 USPQ 418, 420 (CCPA 1970). As set forth in MPEP § 2144.03, if an Applicants traverse an assertion made by an Examiner while taking official notice, the Examiner should cite a reference in support of their assertion. Applicants respectfully

traverse the use of Official Notice and respectfully request the Examiner to submit a reference to support their assertions.

For at least the foregoing reasons, Applicants respectfully request that the rejection over claims 9-10 be withdrawn as *prima facie* case of obvious has not been established.

In the Office Action, claim 11 was rejected under 35 U.S.C. § 103(a) for being allegedly unpatentable over Kurihara as applied to claim 9 above and further in view of U.S. Patent No. 6,567,144 issued to Kim, *et al.* ("Kim").

Claim 11 by virtue of its dependency from claim 9 includes all the features of claim 11. For similar reasons as discussed above, with respect to the rejection under 35 U.S.C. § 103, Kurihara fails to teach or suggest all the limitations of claim 9. Additionally, Kim fails to cure the deficiencies of Kurihara. Again, it appears the Examiner is relying on Official Notice in this rejection, which Applicants respectfully traverse and request a reference to support the Examiner's assertions.

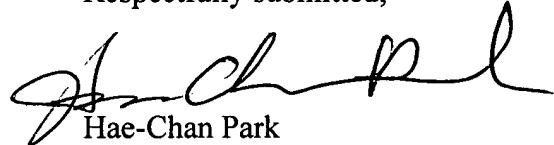
Accordingly, Applicants respectfully submit the rejection under 35 U.S.C. § 103 should be withdrawn.

**CONCLUSION**

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicants believe that a full and complete response has been made to the outstanding Office Action and, as such, claims 9-11 are in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment is respectfully requested.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Hae-Chan Park', written over the printed name.

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Date: June 30, 2004

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